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Description of a new *Lathys* Simon, 1884 (Araneae: Dictynidae) from Majorca, Spain

Описание нового вида рода *Lathys* Simon, 1884 (Araneae: Dictynidae) с Майорки, Испания

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KEY WORDS: Aranei, spiders, *stigmatisata*-group, new species, description.

КЛЮЧЕВЫЕ СЛОВА: пауки, группа видов *stigmatisata*, новый вид, описание.

ABSTRACT. A new spider species, *Lathys mallorcensis* sp.n. is described from Majorca. The species seems confined to hypogean environments of high ground karst landscapes of the Tramuntana mountain range. The new species belongs to the *L. stigmatisata* group and differs from its Mediterranean sibling species by its small size, shape of terminal part of conductor and choice of habitat. The occurrence of *Lathys* species in the Balearic Islands is reviewed.

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РЕЗЮМЕ. Новый вид пауков, *Lathys mallorcensis* sp.n. описан с Майорки. Похоже, что распространение вида ограничено наземными карстовыми ландшафтами горного хребта Трамонтана. Новый вид принадлежит к группе *L. stigmatisata* и отличается от ближайших средиземноморских видов мелкими размерами, формой терминальной части кондуктора и типом местообитания. Дан обзор находок видов *Lathys* на Балеарских островах.

Introduction

Lathys Simon, 1884 is a genus of spiders in the Dictynidae family with 46 accepted species [World Spider Catalog, 2017]. Some of the characters that distinguish *Lathys* include eight eyes with anterior median eyes small, undivided cribellum, low clypeus about the diameter of an anterior median eye, short, not converging endites, long tarsal trichobothria, a modified cymbium, absence of tibial spines on male palp, terminal conductor screw or spine like, relatively long copulatory ducts, and relatively large spermathecae compared to most members of Dictynidae [Almquist 2006, Kaston, 1978; Marusik pers. comm., Nentwig *et al.*, 2017; Zhang *et al.*, 2012]. The *Lathys stigmatisata*-group was first delineated by Lehtinen [1967] as a *Lathys puta* group. Later Marusik *et al.* [2006] unveiled the rather peculiar and unique structures in the conformation of the male palp in this group. They found that the conductor is with two arms, one screwed and one coiled and that the tibial apophyses function as a bracket securing the screwed conductor in position. The combined distribution of the *L. stigmatisata*-group is Holarctic (see Marusik *et al.* [2006] for map). Attempts to identify *Lathys* specimens recently collected in Majorca failed and the specimens were recognized as belonging to a new species of the *L. stigmatisata*-group. During the identification process 14 Palaearctic species and 2 Nearctic species were categorized as belonging to the group using data available in the literature. However, the exact number of species in the group is unknown since some species (*L. balestrerii* Caporiacco, 1934, *L. arabs* Simon, 1910) may have been erroneously synonymised with *L. stigmatisata* (Menge, 1869) [Bosmans *et al.*, 2009; Kovblyuk *et al.*, 2014]. One member of the group, *L. jubata* (Denis, 1947), is possibly a synonym of *L. stigmatisata* [Ledoux *et al.*, 2008]. New species have been added to the group as late as 2012 (*L. subalberta* Zhang, Hu et Zhang, 2012) [Zhang *et al.*, 2012] and 2014 (*L. lehtineni* Kovblyuk, Kastrygina et Omelko, 2014) [Kovblyuk *et al.*, 2014]. There are still many undescribed species [Marusik *et al.*, 2009; Koçyi□it *et al.*, 2016] or insufficiently described species such as *L. truncata* Danilov, 1994 and *L. maculosa* (Karsch, 1879).

The aim of this study is to describe the new Majorcan *Lathys* species. Specimens were found primarily in hypogean environments: in caves, deep in scree and among layered stones deeper in the ground. All records are from karst landscapes of the Tramuntana mountain range. A further aim is to review the occurrences of *Lathys* species in the Balearic Islands.

Materials and methods

Specimens were collected by hand by turning stones in caves and examining surfaces of layered rocks in the ground.



Fig. 1. Steep scree slope at Puig Major, the locality at which site the type specimens were collected.

Рис. 1. Крутой склон с осыпью в Puig Major, местонахождении, где были собраны типовые экземпляры.



Fig. 2. *Lathys mallorcensis* sp.n., habitus of live male.

Рис. 2. *Lathys mallorcensis* sp.n., внешний вид живого самца.

In scree specimens were collected from the surfaces of stones lifted away one by one down to a depth of one meter (Fig. 1). Illustrations were created from photos of selected features using a Leica Wild M10 stereomicroscope fitted with Leica DFC425 digital camera connected to a computer with Leica Application Suite software v. 4.3.0, Zerene Stacker software v. 1.04 and the vector graphics editor Inkscape v. 0.92.

The terminology and abbreviations of palp and epigyne morphology follow Kovblyuk *et al.* [2014] and is based on Marusik *et al.* [2006, 2009], also used by Zhang *et al.* [2012]: Co — copulatory opening; Ct — terminal part of conductor; Ctt — tip of Ct; Dt — dorsal tibial apophysis; Eb — Embolar base; Em — Embolus; Fd — fertilization duct; Ia — apical portion of insemination duct; Ib — basal portion of insemination duct; Ra — intermediate (dorsolateral) apophysis; Sp — spermathecae; Va — ventral apophysis. Further abbreviations used: CL — carapace length; CW — carapace width; OL — opisthosoma length; TL — total length; AME — anterior median eyes; ALE — anterior lateral eyes; PME — posterior median eyes; PLE — posterior lateral eyes; MSS — mesovoid shallow substratum; CJL — coll. Jørgen Lissner; NHMD — Natural History Museum of Denmark; Sd —seminal duct; Ss — origin of seminal duct; UTM — Universal Transverse Mercator coordinate system, Majorca is situated in UTM zone 31 in latitude band S, precision is given to 10 m which is approximately the precision of the Garmin Oregon 450 GPS used to locate positions.

Taxonomy

Lathys mallorcensis **sp.n.**
Figs 2–11.

TYPE MATERIAL: SPAIN. Majorca, Holotype ♂, Puig Major, scree at Es Cards Colers (Fig. 1), 890 m (UTM 31S 48225 440469), 29.X.2014 (specimen matured in captivity around 1.III.2015), J. Lissner leg. Paratypes 2 ♂♂ (matured in captivity), 3 ♀♀ same locality as holotype, 9.X.2015, J. Lissner leg, CJL-11039; 1 ♂: Majorca, Pollença, Cova des Boc, cave, 490 m (UTM 31S 49869 441048), 6.IV.2016, J. Lissner leg, CJL-11400; 2 ♂♂: Majorca, under layered stones along track west of the Cuber reservoir towards Coll de l'Ofre, 750 m (UTM 31S 48012 440224), 29.X.2014 (both specimen matured in captivity c. 20.IV.2016), J. Lissner leg, CJL-11491; 1 ♀: Majorca, Pollença, Cova Morella, cave, 505 m (UTM 31S 49863 441048), 6.IV.2016 (specimen matured in captivity around 1.V.2016), J. Lissner leg, CJL-11500; 1 ♂: Majorca, Massanella, Coll des Prat, rock steppe, cavity in ground under large stone, 1210 m (UTM 31S 48733 440649), 26.IV.2017, J. Lissner leg, CJL-11781.

The holotype and paratypes are deposited at NHMD.

Additional material examined: *Lathys* sp. aff. *narbonensis* (Simon, 1876), 1 ♂ 3 ♀♀, Majorca, Sant Elm, open pine forest with understory bushes and weeds, 30 m, (UTM 31S 44467 438097), 19.IV.2013, J. Lissner leg, CJL-9954. *Lathys teideensis* Wunderlich, 1992, 2 ♂♂, Tenerife, Las Raices, pine forest, 1100 m (UTM 28R 36511 314508), 3.IX.2015, J. Lissner leg, CJL-10927.

DIAGNOSIS. The new species belongs to the *L. stigmatisata*-group. Males differ from its nearest sibling species (*L. lehtineni*, *L. arabs*, *L. stigmatisata*) by the long, straight tip of terminal part of screwed conductor which is parallel with tibia in retrolateral view (perpendicular in sibling species). Females differ from these species and *L. subviridis* Denis, 1937 by small body size and with the exception of *L. arabs* also by larger distance between epigynal openings. The species also differs from related species by occupying



Fig. 3–4. *Lathys mallorcensis* sp.n.: 3 — male facies; 4 — female prosoma. Scale 0.2 mm.
Рис. 3–4. *Lathys mallorcensis* sp.n.: 3 — лицевая сторона самца; 4 — головогрудь самки. Масштаб 0,2 мм.

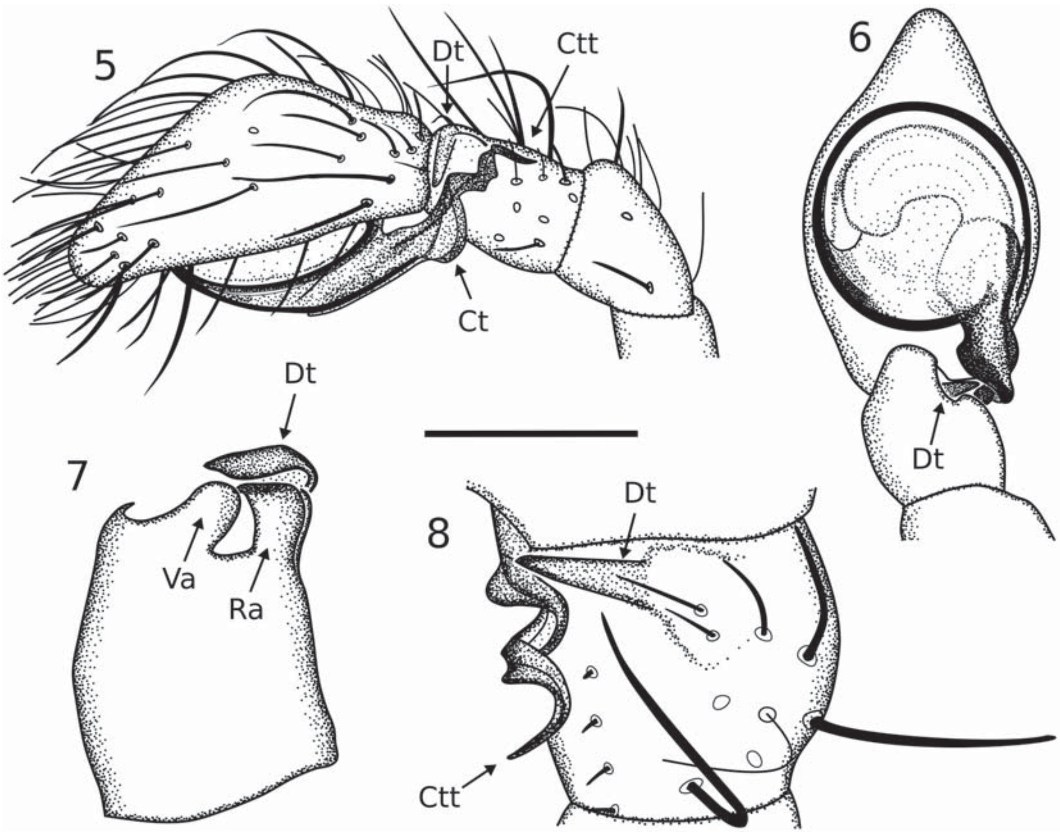


Fig. 5–8. *Lathys mallorcensis* sp.n.: 5 — male palp, retrolateral view; 6 — same, ventral view, hairs omitted; 7 — tibial apophyses; 8 — dorsal aspect of palpal tibia. Scale 5–7 — 0.2 mm, 8 — 0.1 mm.

Рис. 5–8. *Lathys mallorcensis* sp.n.: 5 — пальпа самца, ретролатерально; 6 — то же, вентрально, без волосков; 7 — вырост голени пальпы; 8 — голень пальпы, дорсально. Масштаб: 5–7 — 0,2 мм, 8 — 0,1 мм.

Table 1. Comparison of selected characters for Palaearctic species of the *Lathys stigmatisata* group.
Таблица 1. Сравнение избранных признаков у палеарктических видов группы *Lathys stigmatisata*.

Characters compared	***L. mallorcensis***	***L. lehtineni*** [1]	***L. arabs*** [2, 3]	***L. stigmatisata*** [4, 5]	***L. jubata*** [6]	***L. subviridis*** [1, 7]	***L. pygmaea*** [8]
Region	*Europe*	*Europe*	*Europe*	*Europe*	*Europe*	*Africa*	*Macaronesia*
CL ♂	0.9–1.1	1.0	?	1.0	♂ unknown	♂ unknown	0.6
CL ♀	0.7–0.9	0.9–1.1	?	1.0–1.1	1.1	?	♀ unknown
TL ♂	2.1–2.6	2.2	2–2.5	2	♂ unknown	♂ unknown	1.15
TL ♀	1.6–2.2	2.5–3.2	2.5–3	2.25–2.75	2.95	2.3	♀ unknown
Abdominal pattern	olive grey with dark chevrons	light brown, without pattern	obscure?	dark brown, very faint chevrons	light gray	green-grey with indistinct irregular spots	grey with white spots
Patellar extension	absent	absent	?	present	♂ unknown	♂ unknown	♀ unknown
Distance between epigynal openings	0.8–1.2 diameter	0.5 diameter	0.5–1 diameter	0.1–0.2 diameter	0.1 diameter	0.5 diameter	♀ unknown
Number of coils of basal (vertical) insemination duct	1	1	2	1	1	?	♀ unknown
Conductor, last winding of screwed arm	tip long, straight point parallel tibia	tip short, point perpendicular to tibia	tip very short, point perpendicular to tibia	tip long, straight perpendicular to tibia	♂ unknown	♂ unknown	tip very short, curved, point perpendicular to tibia
Leg annulation	absent	no data	no data	indistinct	absent	absent	present
Habitat	caves, MSS (scree, layered stones)	stony steppes with bushes	*Hedera* vine, bark of Eucalyptus, stones in pine forest	on the ground and on lichens	grasses of a sandy slope at the coast	in grass tussock (*Ampelodesmos mauritanicus*)	pitfall trapped in pine forest
Distribution	Majorca (Spain)	Crimea (Ukraine)	Algeria, Tunisia, Greece	Europe	France	Algeria	Gran Canaria

Table 1 (continued).
Таблица 1 (продолжение).

Characters compared	***L. teideensis*** [9]	***L. spasskyi*** [10, 11]	***L. truncata*** [11, 12]	***L. balestrerii*** [13]	***L. alberta*** [14, 15]	***L. subalberta*** [16]	***L. maculosa*** [17]
Region	*Macaronesia*	*Asia*	*Asia*	*Asia*	*Asia / N. America*	*Asia*	*Asia*
CL ♂	1.05	no data	no data	1.35	1.5	1.29	no data
CL ♀	0.9–1.05	1,0	1.2	1.9	1.5	0.86	no data
TL ♂	2.2	no data	no data	2.5	3.2	2.8	2.0 - 2.5
TL ♀	2.5–2.6	2.8	2.2	2.5	2.5–3.6	2.26	2.0 - 2.5
Abdominal pattern	grey with chevrons	greyish-olive pattern	dark grey with white spots	brown with slant yellow spots	gray with pale chevrons	black chevron-like markings, white spots	grey brown with white spots, chevrons in longitudinal band
Patellar extension	absent	absent	♂ unknown	absent	absent	absent	absent
Distance between epigynal openings	?	0.2–0.3 diameter	0.25–0.45 diameter	0.5 diameter	0.9 diameter	0.4–0.5 diameter	1.8 diameter
Number of coils of basal (vertical) insemination duct	0	2	2-3	2	2	2	2
Conductor, last winding of screwed arm	tip very short, point perpendicular to tibia	tip short, straight, point perpendicular to tibia	♂ unknown	tip long, curved, point perpendicular to tibia	tip short, point 45° to tibia	tip short, point perpendicular to tibia	tip short, point perpendicular to tibia
Leg annulation	present	absent	?	absent	indistinct	present	present
Habitat	stony steppes with bushes	only high ground?	possibly tree trunks and cliffs	grassy meadows among stones above 3000 m	under stones and in ground detritus	no data	no data
Distribution	Tenerife	Azerbaijan to Kyrgyzstan	Kazakhstan to Buryatia	Northern India, Tian Shan, Xinjiang	USA, Canada, Russia	China (Shaanxi)	Korea, Japan

Sources of information: 1 — Kovblyuk *et al.* [2014], 2 — Simon [1911], 3 — Bosmans *et al.* [2009], 4 — Nentwig *et al.* [2017], 5 — Oger [2017], 6 — Denis [1947], 7 — Denis [1937], 8 — Wunderlich [2011,] 9 — Wunderlich [1992], 10 — Andreeva [1976], 11 — Marusik *et al.* [2015], 12 — Danilov [1994], 13 — Caporiacco [1934], 14 — Chamberlin & Gertsch [1958], 15 — Marusik *et al.* [2006], 16 — Zhang *et al.* [2012], 17 — Ono & Ogata [2009].The North American members of the *stigmatisata*-group, *Lathys dixiana* Ivie et Barrows, 1935 and *Lathys coralynae* Gertsch et Davis, 1942, are omitted from the table.

Table 2. *Lathys mallorcensis* sp.n. Counts of cheliceral teeth (ranging from 3–5) on promargin (PM) and retromargin (RM).
Таблица 2. *Lathys mallorcensis* sp.n. Число зубцов хелицер (от 3 до 5) на переднем (PM) и заднем (RM) крае.

No of teeth	3	4	5		3	4	5
♂ PM	1	5	4	♀ PM	1	4	3
♂ RM	0	6	4	♀ RM	2	4	2

Ten chelicers (five specimens) were counted for males, eight (four specimens) for females.

Table 3. *Lathys mallorcensis* sp.n., lengths of leg segments and carapace (mm) of adult male and female. The ratio of total leg length (coxa and trochanters excluded) to carapace length (L/C) is calculated.
Таблица 3. *Lathys mallorcensis* sp.n., длина члеников ног и головогруди половозрелого самца и самки. Указано также соотношение общей длины ноги (без тазика и вертлуга) к длине головогрудного щита.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total	Carapace	L/C ratio
I ♂	0.96	0.36	0.83	0.61	0.42	3.18	0.91	3.5
I ♀	0.71	0.31	0.51	0.45	0.28	2.26	0.92	2.5

Adult male and female are taken with approximately same size of carapace; one leg of each sex is measured.

hypogean environments, all other species are epigean. Further characters that separate the new species from Palaearctic members of the *stigmatisata*-group are listed in Table 1.

DESCRIPTION. Male. Measurements: (n=5, average value with range in parenthesis): TL: 2.26 (2.1–2.6), CL: 0.98 (0.9–1.1), CW: 0.78 (0.7–0.9), OL: 1.18 (1.1–1.3). Carapace olive green with dark grey reticulations and striae (Figs. 2–4). Chelicerae light olive green (Fig. 3). Sternum coloured as carapace with dark reticulations at margins. Dorsum of abdomen olive green, dark grey marking anteriorly followed by chevrons broken in to dark blotches along midline (Fig. 2). Legs whitish, very slightly darkened apically on tibia IV and metatarsi I–IV.

Posterior eye rows slightly procurv in dorsal view, anterior row slightly recurved, posterior row procurved as seen from in front. Eyes rather large compared to most congeners, the distance between AME is just 0.75 of the diameter (Fig. 3). PME separated by their diameter, from the PLE by 1.5 times their diameter. Eye sizes (n=1): AME 0.025, ALE 0.075, PME 0.072, PLE 0.080. Clypeus narrow, about equal to the diameter of one AME (Fig. 3).

Chelicerae with (3)4–5 teeth of variable size on pro- and retromargin (Table 2). Number of teeth vary among individuals and between right and left chelicera. Promargin typically with 2 large teeth and 1–3 smaller teeth or denticles, while teeth of retromargin generally smaller with some represented by denticles. Males with greater differences in tooth sizes than females. Male relatively long-legged compared to female. Leg I 3.5 times the length of the carapace versus 2.5 times in the female (Table 3). Terminal part of conductor forms an open spiral with well separated, slender windings. The section at the very tip relatively long, straight and parallel with palpal tibia in retrolateral view (Fig. 5). Palpal patella without an extension. Tibia with a distinct, well-developed dorsal apophysis having straight edges forming an elongated triangle perpendicular to axis of tibia, more than twice as long as wide when viewed in dorsal view (Fig. 8). In retrolateral view it is seen to point towards terminal, screwed conductor (Fig. 4). The apex of the dorsal apophysis is also visible in ventral view (Fig. 6). Ventral and retrolateral tibial apophyses obscured by the terminal conductor and difficult to observe unless the bulb with conductor is removed as done to illustrate all tibial apophyses in Fig. 7. A longitudinal furrow of the ventral apophysis (sensu Marusik [2006]) is indistinct and is only vaguely discernible using a microscope (furrow not drawn in Fig. 7, based on stereomicroscope photo. Base of embolus in 7 o'clock position when viewing

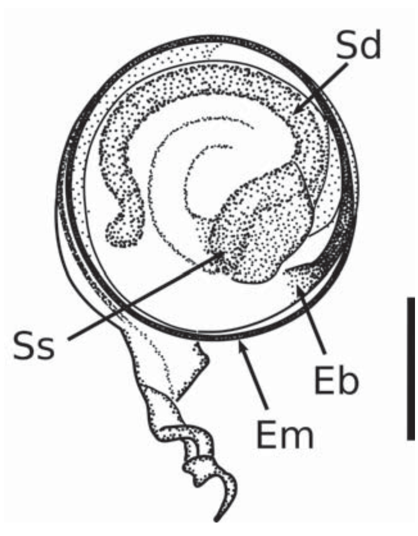


Fig. 9. *Lathys mallorcensis* sp.n., dorsal aspect of bulbus.
Рис. 9. *Lathys mallorcensis* sp.n., бульбус дорсально.

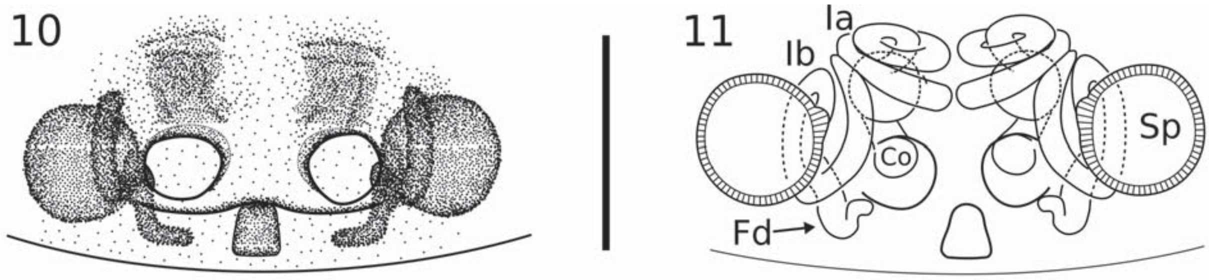


Fig. 10–11. *Lathys mallorcensis* sp.n.: 10 — epigyne; 11 — vulva. Scale 0.1 mm.
Рис. 10–11. *Lathys mallorcensis* sp.n.: 10 — эпигина; 11 — вульва. Масштаб 0,1 мм.

detached bulb dorsally (Fig. 9). Seminal duct relatively wide and of uniform thickness, lacking a seminal loop.

Female. Measurements: (n=4, average value with range in parenthesis): TL: 1.85 (1.6–2.2), CL: 0.79 (0.7–0.9), CW: 0.64 (0.6–0.7), OL: 1.13 (0.9–1.4). Only larger females overlap in size with smaller males. Colouration as in male except for carapace markings in front of fovea forming longitudinal cells, quite distinct in some specimens (Fig. 4). Width of clypeus as in males. Eye sizes (n=1): AME 0.024, ALE 0.067, PME 0.069, PLE 0.071. Chelicerae with 3–5 teeth on both margins with 4 being most frequent in both rows (Table 2). The teeth nearest fang socket are mostly contiguous the most distal sometimes free. The second promarginal tooth distal to fang socket much larger than the remaining, more or less similar-sized teeth. Some teeth may be represented by denticles only. Legs whitish, not annulated or darkened apically on segments. Epigyne as in Fig. 10. The epigynal openings approximately circular and separated by 0.8–1.2 diameter. With a small sclerotized central plate near epigastric furrow (Fig. 10). The length/width ratio of the plate varies among individuals and is also dependent on viewing angle. The round spermathecae, inseminations ducts and fertilization ducts are partly visible through the cuticle. The copulatory openings are situated in the epigynal atrium, each copulatory opening slightly anterior to the centre of the epigynal openings (Fig. 11). Insemination ducts not funnel-shaped as diameter of copulatory opening only slightly larger than diameter of ducts. Inseminations ducts each possess a globular swelling (a gland?) about 0.01 mm after copulatory openings. Swellings are difficult to discern when viewing vulva in dorsal view since they are partly enclosed by the coil of duct windings. They are drawn with dotted lines in Fig. 11. Ducts continue from near top of swellings and enter spermathecae after two horizontal and one vertical winding (Fig. 11).

TYPE LOCALITY. Majorca, Puig Major at Es Cards Colers.

DISTRIBUTION: The species is only known from the Serra de Tramuntana mountain range of Majorca. Specimens have been collected between Soller and Pollença at 500–1200 m elevation (Fig. 12).

HABITAT AND ECOLOGY. The holotype specimen and paratypes were found among stones on a steep slope with scree composed of large layered stones with nearest vegetation at least 5 m away (Fig. 1). Specimens were scarce in top layers (only one subadult male) becoming more common deep in scree, here it co-occurred with troglophilic species such as *Leptoneta infuscata* Simon, 1872 and *Mysmena leucoplagiata* (Simon, 1879). Females were only found deep in the scree. Further records are from the underside of layered stones deeply embedded in a creek bank (subadult male), in a cavity beneath a square meter large stone on high ground (Massanella, 1200 m) and from under stones on a cave floor about 5–20 m from entrance in subdued light (male and female), here also with *Leptoneta infuscata*. Thus it seems that the species prefers dark and relatively cold places and is not associated with vegetation. Females seem to avoid top the layers, except in caves and perhaps their generally smaller sizes compared to males is related to food being scarcer in caves and in the crevices deeper in the ground. In captivity it produces a small cribellate web and readily catches small flies (in one instance also a springtail) if prey size is smaller than the spider itself.

PHENOLOGY. ♂ III–IV ♀ V, X. Maturity periods for both sexes are incompletely known.

ETYMOLOGY. Specific epithet *mallorcensis*, of Majorca, where the species was found.

Comments

As noted by Lehtinen [1967] there is considerable intraspecific variation in *Lathys*. Thus, care should be taken in separating the rather similar species of the *L. stigmatisata*-group, in particular females. Available data indicate that the female of *L. mallorcensis* sp.n. is smaller than all congroupers, *L. pygmaea* Wunderlich, 2011 excepted, but size may is not be a reliable character. In most females, perhaps all, there is a pair of circular epigynal openings separated by a factor of their diameter ranging from 0.1 (nearly touching) to 1.8 (widely separated). The degree of separation is a helpful character in distinguishing the species, but many species shows overlap. Separation of males also poses some problems. The shape of the screwed terminal part of the conductor is similar in some species. However, the conductor of *L. mallorcensis* sp.n. is distinctive having a long and straight section at the very tip that is



Fig. 12. *Lathys mallorcensis* sp.n., distribution in Majorca is marked with crosses.
Рис. 12. *Lathys mallorcensis* sp.n., карта распространения.

parallel with palpal tibia in retrolateral view (Ctt in Fig. 4), the shape nearly identical in the males inspected. In all other species for which illustrations exist of the palp in retrolateral view this tip is either short and curved or is oriented perpendicular to palpal tibia. It is possible that the position of base of embolus and morphology of seminal ducts on inspecting detached bulb in dorsal view are the best characters to separate males. Illustrations are available for *L. mallorcensis* sp.n, *L. alberta* Gertsch, 1946, *L. stigmatisata* and *L. spasskyi* Andreeva et Tyschchenko, 1969 and in each of these four species these structures are distinctive (compare figs in Marusik *et al*. [2006 (Fig. 21); 2015 (Figs. 51, 53)] with fig. 9). *Lathys mallorcensis* sp.n. shows some variation in cheliceral dentition and this character thus seems of limited value in separating the species. Conspecificity with two badly described species from Europe, *L. lutulenta* Simon, 1914 and *L. lepida* O. Pickard-Cambridge, 1909 of unknown group affiliation, is not considered an option as these species possess clearly annulated legs according to the original descriptions. As *L. mallorcensis* sp.n. is with a pair of epigynal openings it is easily separated from other *Lathys* species that may occur in Majorca (*L. narbonensis*, *L. humilis*, *L. heterophthalma*) since these species have a single round or transverse epigynal opening and/or is with clearly annulated legs. The male palps of these species are also distinctly different. There is only limited literature on the occurrence of *Lathys* in the Balearic Islands. The studies of Orghidan *et al.* [1975] and Pons [2004] list records restricted to Majorca and the Cabrera archipelago. In the study of Orghidan, *Lathys* females found under a stone at Illetas and at Foret de Ca'n Sion, Majorca were assigned to "*Scotolathys* cf. *heterophthalma*" (=*Lathys heterophthalma* Kulczyński, 1891). Occurrence in Majorca is possible as the species has been recorded near Toulouse in southern France [Déjean, 2015]. The study of Orghidan also lists records of female *Lathys narbonensis* (Simon, 1876) from Illetes near Calvià and from Bosc de Ca'n Sion near Pollença. The original description of this species [Simon, 1914] was inadequate and lacks detailed figures which make identification of *L. narbonensis* difficult. Later studies attempting to assign specimens to this species may not all have been correct. The illustrations of epigynes in Denis [1947] and Ledoux *et al.* [2008] do not seem to agree, also the illustration of the male palp in Noflatscher [1993] may relate to a different species. Noflatscher did not identify his male, merely only proposed a match with *L. narbonensis*. Thus, listing at the World Spider Catalog should perhaps await comparison of Noflatschers male with type material in order to confirm conspecificity. As in Noflatschers study, specimens collected at St. Elm in the present study could not be assigned to *L. narbonensis* with certainty. It is hoped to deal with this problem in a later paper. Pons [2004] lists several records of juvenile specimens presumably belonging to *Lathys humilis* (Blackwall, 1855) from various islands in the Cabrera archipelago where it is stated as commonly

found on bushes along the coast. Recently, one adult female was recorded from Es Tudons, Menorca, confirming the occurrence of this species in the Balearic Islands [Barrientos, Febrer, 2017].

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